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ABSTRACT

The inservice program described here provides workshop participants with background theory on young children's outdoor gross motor play, outdoor program design, playground apparatus, and alternative methods for providing gross motor experiences for young children. A brief description of the study's purpose and hypotheses is provided in Chapter I. Chapter II offers an intense investigation of the following areas: (1) values of outdoor play experiences discussed in view of the "whole-child" educational philosophy; (2) playground characteristics defining playground environments; (3) the value of the traditional playground; and (4) the usefulness of the developmental playground. Chapter III describes a design for staff development via workshop inservice; the design utilizes the Joyce Process Model and is divided into two segments encompassing theory, demonstration, experimentation, and feedback. Objectives for each segment, lists of materials required, and presentation procedures are described. The evaluation tools used to measure and determine program effectiveness are described in Chapter IV. Appendices include a price list for commercial equipment, a format for a small-group activity record-keeping card, and a list of outdoor resources. (Author/MP)

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WAYNE STATE UNIVERSITY

AN IN-SERVICE PROGRAM IN THE AREA OF CHILDREN'S OUTDOOR GROSS MOTOR PLAYGROUND CONSIDERATIONS, DESIGNS AND APPARATI FOR THE NATIONAL ASSOCIATION FOR THE EDUCATION OF YOUNG CHILDREN'S 1980 CONFERENCE ATTENDEES

A FIELD STUDY PROJECT

SUBMITTED TO DR. ROGER DAMONT IN COMPLETION OF THE DEGREE OF EDUCATIONAL ADMINISTRATION SPECIALIST DEGREE

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CHAPTER I

As caretakers of young children, our society, in most cases has failed to effectively and appropriately meet young children's physical needs, especially those of a gross motor nature. In general, most private child care centers and public preschool programs are likely to make some indoor gross motor inclusions within their programming due to, if nothing else, licensing procedures required by Social Services. However, these centers may be less likely to adequately provide for young children's outdoor gross motor needs. This statement can be substantiated by the Overholser/Pellerin Playground Survey (1976) which was conducted in the tri-county area. The results of this survey confirm the statement that most outdoor facilities for children inadequately meet young children's gross motor needs. (See Appendix I) The fault very often lies in poor design limiting the extent to which the equipment could be developmentally utilized by young children In addition, most teachers of young children lack the educational emphasis necessary in this area to provide an appropriate gross motor outdoor program with developmentaly designed apparati.

For this reason, this in-service program in the area of gross motor outdoor playgrounds and the accompanying play apparati for young children has been developed for the National Association for the Education of Young Children 1980 National Conference attendees. Since some teachers of young children and their preschool programs have failed to adequately meet the physical and developmental needs of young children, it seems apparent that this situation could and should be influenced via an in-service workshop program for the N.A.E.Y.C. attendees. This in-service will provide

the participants with the background theory on young children's outdoor gross motor play considerations, designs, apparati, and alternative methods for providing gross motor experiences for young children.

The in-service workshop will be presented November 24, 1980 at the National Conference to be held in San Francisco. The limitation of this project is the one and half hour time frame assigned to us by the N.A.E.Y.C. Planning Committee. (See Appendix II) Therefore this in-service workshop will need to be comprehensively and precisely designed to meet this prerequisite.

HYPOTHESIS

The hypothesis formulating the basis of this workshop may be articulated as follows:

Hypothesis I: Is there evidence of a lack of information in the area of children's gross motor playground considerations, designs, and apparati?

Hypothesis II: Will an in-service workshop for the N.A.E.Y.C. attendees deseminate information that will provide the attendees with background theory, information, and methods for providing appropriate outdoor gross motor experiences and apparati for young children?

These hypothesis will be tested by formally presenting the in-service workshop entitled "Encounters of the Outdoor Kind" at the 1980 National N.A.E.Y.C. Conference in November and by means of an evaluation of the workshop by the participants.

SIGNIFICANCE

A thorough exploration of the literature and research in the area of the values of children's outdoor gross motor playground

considerations, designs and apparati will be conducted, included within this terminal project, and deseminated via the in-service workshop which will provide helpful as well as practical methods to the workshop participants when they consider the provision of outdoor gross motor encounters for young children in their own program.

CHAPTER II

The background information for this project will consist of an intense investigation of the following areas:

1. Values of outdoor gross motor play experiences discussed in view of the whole child education philosophy.
2. The playground characteristics defining a playground environment.
3. A critique on the Traditional Playground equipment.
4. Creative Developmental playground equipment.

VALUES OF OUTDOOR GROSS MOTOR PLAY EXPERIENCES

Most educators, administrators, parents and teachers are concerned about the quality of the education that their children receive through their school experience. More and more frequently educational concerns are the topic for magazine and newspaper articles. Much of what is written today calls for "whole child education" which goes beyond the intellectual concerns into the social, emotional and physical realms. Educating the whole child is not a new idea. Educators from Plato to Rosseau to Froebel have advocated the same concept. Yet quite frequently the social, emotional and physical needs are pushed aside in attempts to promote the intellectual facet. If the social and emotional needs are considered at all then the last, physical needs, often attract the least educational attention. This should not be, for through a child's physical play experience which can be devcloped easily through gross motor encounters, the child acquires and utilizes not only important physical skills, but also social, emotional and intellectual skills as well. Consider these situations: Social skills may be developed

as the child waits his turn to climb the net, as he shares the wheel toy, as he cooperates with others in pulling a loaded wagon up an incline plane or slope. Emotional needs too may be met through such play wherein the child has the opportunity to drain off unacceptable feelings, frustrations and impulses by means of running, climbing, jumping, etc. Intellectual needs may, likewise, be met as the child in a direct firsthand way handles the concepts of "up", "down", "high", "low", "top", "bottom", "right", "left", "balance", and "sequence" as he controls and manipulates his body in space through climbing, crawling, pushing, shoving, jumping, pulling, and lifting. Since physical gross motor play involves the whole child, provision should be made for it.

Because children grow physically, socially, emotionally and intellectually through outdoor gross motor play encounters which enables them to assume more control over their lives with their increased muscular competence, such play must be made available to them in areas specifically reserved for this type of play.

This area is commonly referred to as a playground. A playground may be defined as a small area specifically designed for and used by children in pursuit of recreation. (Dee and Lieberman, 1970). Much has been written about the characteristics of a playground environment which merits discussion here.

THE PLAYGROUND

Many factors contribute to a well-designed playground. These factors may be grouped around the following areas: health and safety, organization of playground space, playground equipment and the physical composition of the area itself.

The health and safety of the children extends virtually into each of these groupings. The playground must be a safe environment in which they can freely play. Proper prior planning of playground facilities can insure that children will indeed be safe. Safety considerations may be facilitated by simply surrounding the area with a durable chain link fence. This will enable the children to continue their play without outside interference from wandering animals or adults. It will also prevent children from accidently running into an alley or street. The fence should have a gate as an added precaution. A chain link fence will also assist in the supervision of the children and play area regardless of equipment arrangement. It was found that children prefer playgrounds which are in close proximity to people and other activities (Bishop and Peterson, 1971). Children enjoy observing the busy active world beyond the playground. A chain link fence allows this to occur.

The arrangement and organization of the playground facilities can also help contribute to the children's continued safe play by placing equipment pieces which encourage active vigorous play well away from quiet play areas such as sand, dirt or water play. Controlling the traffic flow pattern by means of paths, walkways and equipment can also help deflect children from potential hazardous situations. Traffic patterns must allow enough open space around each equipment piece so that the arrangement, placement and use of such pieces do not conflict with each other or the children's method of utilization. For example, traffic patterns in the swing area must be arranged so that a child will not be in danger of being hit by the motion of the swings. These problems may be avoided by bringing the traffic flow under control by the

use of paths, walkways or sidewalks (Bennett - MSU Graduate). Asphalt or cemented areas can control traffic flow patterns by their placement within the playground and their shape. For example, a circle, oval or figure eight shape is designed to keep the flow moving steadily along by preventing bottlenecking, traffic pile ups, jams or collisions, etc. These shapes help to steer children away from hazardous active areas again insuring their safety.

Maintaining sufficient space between each apparatus will also help prevent accident or injury that could arise from improper cramped equipment placement.

When considering the overall organization of the playground space, provisions must be made for free open spaces which may be counter balanced by quiet private space inclusions. These open spaces are necessary for skipping, jumping, runnning and rolling. Open areas also are useful in separating active vigorous play areas from quiet restful play areas. Bishop and Peterson (1971) found that children do not respond to open space as a playground though, unless playground equipment is available.

It is likewise important to realize that a well arranged playground will have a specific area that provides a paved space, a grass space, a digging space, a water space, a dramatic play space, an open space, a quiet space and appropriately arranged space for vigorous, active involved gross motor play.

It is also important to provide opportunities for imaginative play. Such equipment provides the potential for rich play experiences for children which widens the scope and increases the play potential of the playground. It is important that the

dramatic play space equipment be designed so that it promotes, rather than prohibits, imaginative play. Equipment that is built according to adult play conceptions and expectations which give rise to apparatus that exists in the form of trains, boats, and rocket ships, limits the imaginative play it is designed to encourage (Ellis, 1971). An enclosed undefined area whether roofed or unroofed provides a far richer dramatic play encounter for children who then must decide and define what they wish that area to be. The children's play, rather than the adult's ideas, is utilized. In a well planned playground, the dramatic play area is an important component (Ellis, 1970).

The kind of equipment that is chosen for the playground is also very important not only from a health and safety point of view, but also because it determines the nature and quality of the gross motor experience that children may encounter while using the equipment. Carefully selected equipment provides the children with the opportunities to utilize the equipment successfully. Properly designed equipment allows for a variety of gross motor options (Grasez, 1968). It must be as adaptive as possible, changing and becoming more complex and challenging as the child's muscular skills increase and develop (Ellis, 1970 Grasez, 1968). Such equipment should be developmentally built for the children who will use it. Health and safety responsibilities dictate that if it's to be used by young children, the height of the apparatus, the spacing between bars and rungs, the angle of the ladder, etc., is within the developmental levels of the children for whom it is planned. Equipment should be safe, sturdy, varied, creative, fluid, changing, adaptive, manipulative, and challenging. It was found that playground equipment

traditionally found in most urban areas seldom has any of the above characteristics (Ellis, 1970). Equipment, in general, is limited, stationary, non-manipulative and unchanging. Most playgrounds replicate each other and very little has happened to differentiate one from another. This, Ellis suggests, leads to monotony and lack of involvement on the part of the child. He suggests that man, due to neophilic nature, abhores sameness. Instead, he requires constant opportunities to deal with the environment in a stimulating capacity, thus increasing his store of knowledge as he interacts with the environment, thus it becomes, at times, a knowledge-seeking behavior. Familiarity with the playground equipment reduces exploration (Harlow, 1940; Dember and Earl, 1970). A changing environment on the other hand, encourages interest and extends exploration for children. For these reasons, playgrounds should be varied as well as adaptive.

Lastly, a well designed playground's physical surfaces, levels and surroundings, must likewise be properly planned. Whenever possible a combination of surfaces results in a richer learning and play environment for children affording them with the opportunity to look, touch and compare surfaces (Bishop and Peterson, 1971). Some surfaces are better for some activities than others. For example, cement and asphalt are better for wheel toys than grass. Grass or sand may be better for climbing equipment. Using pea gravel or tanbark not only affords children the opportunity to compare items but also facilitates drainage problems resulting from snow or rain but may cause safety or health concerns (falls, scratches, cuts, etc.) when used under climbing equipment.

Each item has its advantages and disadvantages and is to be carefully evaluated and assessed before it is used. The ideal setting suggest the combination approach; grass and asphalt (Dee, 1970). Surfaces must always be free of broken glass, sharp rocks, sticks, rusty tin cans, etc.

Changing land levels provide children with the opportunities to utilize their bodies as they manipulate themselves through that space. Whenever possible, levels should vary. Flat surfaces should be balanced by hills, slopes or inclines. If the environment prevents this and is flat, then equipment must compensate for this by means of ramps, etc.

The aesthetic aspect of the playground must not be overlooked. It, too, is an important feature in the playground. It can be enhanced in a natural way through the plants, shrubs, trees, and flowers which may be in the area. Area trees that are evergreen, flowering and perennial not only help provide natural shade and wind barriers but also may help serve to expand the child's knowledge and understanding of the natural world surrounding him. A quiet water play "pond" area sufficiently shallow so as to avoid any health hazard as it melts, freezes, ripples, etc., can also, while remaining visually appealing, extend the child's knowledge of the natural world.

Equipment may either be colorfully painted or stained in a natural environmental shade blending in with and harmonizing with the environment (Bishop and Peterson, 1971).

In summary, then, a playground should be designed with the children's health, welfare, and safety in view. The equipment is developmentally suited for the children who are to utilize it.

It will be appropriately organized and arranged insuring not only safety, but also providing the option of either vigorous active play or quiet restful play in a well shaded or roofed area, well protected from the wind, rain and sun. Through its equipment options, it is fluid, manipulative, varied and changing, and lastly, must be aesthetically pleasing, including and exploiting the natural non-toxic landscaping of the environment.

THE TRADITIONAL PLAYGROUND - A CRITIQUE

Playgrounds by design may be classified Traditional or Creative. The Traditional Playground is characterized by the galvanized steel components; slides, swings, monkey bars, merry-go-rounds, etc. Most Traditional Playgrounds are composed of permanent, stationary, expensive, non-manipulative equipment pieces whose uses are limited. It has been found that the most playground equipment available to children today makes a concerted effort to preempt the behavior of the individual (Ellis, 1971). There is a right way, he says, to use such equipment pieces rather than a concerted design effort to present a number of options. There is little children can do on such traditional pieces such as swings, slides, merry-go-rounds and the like. When children improvise and experiment, trying out different ways to use the equipment, serious injury often results or can be clearly seen by reviewing the Consumer Product Safety Commission's Report (1975).

The Traditional Playground is a place where children play using gross motor responses (Ellis, 1970). He calls these playgrounds stereotyped and limited. Duplication of layout

and equipment is seen all over our country. Ellis goes on to say that the Traditional Playgrounds are usually a galvanized steel simulation of a jungle setting more suited to our simian ancestors than to our highly sophisticated offspring. A similar label, "The Asphalt Jungle", has been used to describe Traditional Playgrounds (Dee and Liebman, 1970). They describe playgrounds in the City of Baltimore as falling into one of three types.

Type I is called Asphalt Jungle consisting of an area having an asphalt surface containing a few swings and slides and a basketball court. Type II is a Type I Playground with some "extras" in the form of a building in which activities such as arts, crafts, movies, singing and music and other passive games are offered. Type III is a combination of Type II and a portable swimming pool (Dee and Liebman, 1970). The Asphalt Jungle Playground commands an expected daily attendance of twenty children. If such playgrounds have no supervision, it was found that the facility had little or no attendance. The implications of interested adult supervision are staggering and should be heeded in order to prevent playground under utilization. The Overholser/Pellerin Survey (See Appendix I) of local and state outside playgrounds supports Ellis's position that there has been little evolution of the Traditional Playground. Playgrounds of today look very similar, in most instances, to those of fifty years ago. This is, in part, a practical matter of maintenance. The assumption behind the construction of the Traditional Playground is that it is economically feasible as well as desireable to design andeasy to maintain, durable, galvanized steel facility. According to this philosophy a "good" playground is one that requires little care, little upkeep, little maintenance (Ellis, 1970). This, then, is a description of the Traditional Playground.

Perhaps a more critical look should be taken especially in view of the preceding information.

Since the Traditional Playground is under utilized and stands idle 89-90% of the time, it seems apparent that something must be wrong with such equipment (Dee and Liebman, 1970). Why do children fail to use the traditional equipment? An explanation is posed by taking into consideration the arousal seeking theory of play which implies that unless a playground changes offering more gross motor options, it soon becomes redundant and boring. When this happens play and utilization of its equipment falls off. Traditional playgrounds are not used because they fail to provide pacer stimuli, interactions with an environment that spirals upward in complexity. Others maintain that if the playground interactions are too simple, too redundant, they become boring (Ellis, 1971). Instead the playgrounds "must be capable of supporting an escalating behavioral complexity on the part of the children" who use them (Ellis, 1970; page 40). Furthermore, it was found that children left non-manipulative equipment pieces stand idle much of the time (Wade, 1968). Children learn by manipulating the space, the people and the objects within their experience. Studies suggest that for primates, for neophilic species of which man is a member, the opportunities to manipulate the environment sustain and maintain interest (Harlow, 1949). Harlow attributes the desire to manipulate the environment on the part of the children to the existence of an exploratory-investigatory drive. He feels that a manipulative drive can best account for the desire for a changing environment. He suggests that the drive for manipulation may be as basic and as strong as any homeostatic drive (Harlow, 1949).

He states furthermore, that "there is some reason to believe these drives can be as efficient in facilitating learning as the homeostatic drives" (Harlow, 1949; page 234). It has been reported that manipulating the environment serves as an interest sustaining element (Denber and Earl, 1957). They report such behavior may be labeled "exploration", "manipulation", or "curiosity". They go on to suggest that these conditions may be elicited externally by the environment if it is novel or complex. They contend that exploration, manipulation and curiosity belong to a class of behavior known as "attention". Through their research it was found that attention can be sustained if the stimulus increases in complexity. This information is consistent with the aforementioned pacer stimuli material. Dunber and Earl report that change also helps maintain attention and hence, interest. Portable equipment should be included with a playground's design since it allows children to organize, change and rearrange; in short, manipulate playground space (Leeper, 1974). In view of this, then, is it any wonder that the Traditional Playground filled with stationary, non-portable, non-manipulative equipment, calling for by nature of its design a one way, "right" way of using on thepart of the children, fails to interest children? Additionally, playgrounds, in general, are essentially static, tubular and predictable (Ellis, 1971). Sustained attention or interest hinges, in part, on change and a certain measure of unpredictability (Denber and Earl, 1957). Clearly this is not a characteristic of the Traditional Playground Ellis continues, saying, "the essential ingredient for a playground is that it should elicit new responses from the child as he plays and these responses should increase in complexity as

play proceeds. The playground (equipment) should avoid pre-empting the action of the child. The items which sustain attention and generate the greatest number of responses are those that are manipulative." (Ellis, 1970; page 5).

Traditional Playgrounds then, due to their stationary non-manipulative, unchanging components, need change in order to more effectively meet young children's needs both physical and intellectual. Traditional Playgrounds fail, not only by their optionless stationary equipment, but also because of some very fundamental construction flaws which jeopardize the children's continued health, safety and welfare. From a safety point of view, Traditional Playground equipment requires a closer look. Statistics based on January 1, 1974 to December 31, 1974, found that nationwide 118,000 children received emergency room treatment, 45,000 of these children sustained injury which occurred on public playground equipment (Consumers Product Safety Commission's Report, 1975). Seventy-eight percent of the children were under the age of ten. Eighty-six percent of all the injuries were caused by falls, by being hit by moving apparatus such as swings, or by having extremities pinched or trapped at pivot points. Deaths were caused by falls, by being hung or as a result of being hit by moving apparatus. Climbing apparatus caused thirty-five percent of the injuries. Slides accounted for twenty-eight percent of the injuries. Swings accounted for twenty-one percent. Even seesaws claimed a five percent injury rate.

Injuries resulting from slides occurred due to falls over the platform, falls from the side of the slide and falls from ladders (Consumers Report, 1975). Roughhousing, waling up or down the slide, loosening grip, slipping and losing balance

were factors cited in these falls. Ellis maintains that option-less, pre-empting Traditional play equipment encourages children to seek new experiences on such equipment through two methods; (1) uncertainty of exploration of equipment often taking the form of equipment misuse and (2) the excitement created by the playground's destruction. The Hazard Analysis of Injuries Relating to Playground Equipment Report found this to be true as well (1970). More often than not the child's behavior was other than the use for which the equipment was designed. The behavior may be described as "roughhousing", walking up and down slides and climbing onto any aspect of the playground apparatus that allowed foothold. Climbing apparatus also produces injuries as the result of falls to the ground primarily caused by slipping, loosening grip and loss of balance. Play characteristics noted in climbing apparatus accidents were swinging from rung to rung, standing and jumping from the bars.

Swing accidents were caused by loosening grip and falling, standing on the swings and being hit by a swing in motion.

Merry-go-round accidents produced injuries to fingers which were caught in handgrips. Losing grip and losing balance also produced accidents leading to injuries while playing on the apparatus.

The seesaw led to falls while in the "up" position. Falls were also sustained while the child attempted to mount the apparatus.

Clearly such equipment commonly found on Traditional Playgrounds by nature of its construction and options is in 45,000 instances somewhat dangerous.

In view of this, playground equipment must be varied allowing for safe experimentation which does not endanger the child.

Playground equipment must be designed to minimize falls, slips, etc. This can be achieved, in part, by considering carefully the height of the apparatus from the ground, the provision of safe options allowing for free muscular experimentation, spacing between the rungs, provision of railings, guard rails, hand holds, etc. Some of these safety concerns may be partially alleviated by considering carefully the design of the equipment apparatus itself. Enclosed tube slides, for example, can prevent accidents resulting from walking up or down the apparatus.

The cost involved with the purchase of Traditional Playground equipment which has been demonstrated to afford children with very little muscular options and is, in many instances, dangerous or unsafe, must also be considered. Consulting any catalogue for playground equipment will reveal that swings, slides, merry-go-rounds, etc., are quite expensive (Schoolyard Big Toys Price List A-80). These galvanized, stationary, non-manipulative, often idle, sometimes unsafe, accident producing equipment pieces carry very high price tags. A slide already shown to account for twenty-eight percent of the emergency room treatment cost $1,760 (see Appendix III). Preschool swings which accounted for twenty-one percent of the accidents requiring emergency room care costs $394.00. Climbing apparati range in price from $366 to $1,531. Clearly, Traditional Playground prices are costly as well as unsafe. In view of all this information, it can be seen that the Traditional Playgrounds need revamping. Since these playgrounds fail to provide children with safe options for increased and varied stimulation preventing boredom and under utilization and are additional space consuming, costly and at times dangerous. Thus the answer to such equipment lies elsewhere.

THE CREATIVE DEVELOPMENTAL PLAYGROUND

We agree with Ellis that the solution to the problem of children's gross motor outdoor play lies in the construction of a Creative (fluid, challenging, safe, versatile, adaptive, manipulative, changing) Developmental (properly designed so it fits the child in terms of hand grip potential, height, spacing skill repertoire) Playscope Superstructure. Such a structure allows by means of its design, gross muscle opportunities which provides children with the opportunity to more safely practice, expand, perfect and master new skills as the play structure is revisited. This playscope must be designed to emphasize experimentation, imagination, exploration, manipulation and investigation. The following hints should be considered: changing environment, manipulation opportunities and gross motor options which may prevent boredom when labeling a playground "creative".

OTHER CREATIVE PLAYGROUNDS

Playgrounds which are very creative are available in Toronto and England (Sinclair, 1974). Very few exist in the United States due to their unconventional appearance. They are called Adventure or Junk Playgrounds. They are areas which are fenced, which are filled with scrap materials such as brick, lumber, ties, chain, etc., and tools which allow the child to define, arrange and change his space by constructing freely with the above materials. These playgrounds change as the Children's ideas and concepts change. They become more and more complex as the child's competencies increase. However, the Adventure Playground while low in cost and while

manipulatory, changing and creative does not include as much gross motor activities per se and are only an example of one type of Creative Playground. A more comprehensive Creative Developmental Playscope will provide the opportunities for changing and manipulating the space by means of portable equipment inclusions-ramps, planks, ladders, blocks, etc., while providing a variation of gross motor options that are safe. A comprehensive Creative Developmental Playground must be versatile, adaptive, challenging, manipulative, safe and ideally, low in cost.

CHAPTER III

Design

The in-service for the National Association for the Education of Young Children's 1980 National Conference attendees entitled, "Encounters of the Outdoor Kind" will be designed utilizing the Joyce Process Model for staff in-service development. The Joyce Process Model was selected because it most effectively will disseminate the information provided by the presenters (the authors of this paper). Since the features of the Joyce Process Model include theory, demonstration, experimentation and feedback, this in-service will include segments corresponding to these components. Furthermore, this model meets the criteria and specifications established by the N.A.E.Y.C. Planning Committee which strongly suggest the inclusion of a participatory component to workshop presentation.

At this point, a definition of the components of the Joyce Process Model is necessary. The first component, Theory, may be defined as the instructional, information facet. Within this facet, theory and background research relevant to the in-service is presented utilizing a variety of methods, materials, and techniques ranging from lecturettes, audio-visual materials, and workshops to participatory simulations.

The Demonstration facet may be defined as the integration and assimilation of the presented data from the first facet. It involves the cognative functions of the attendees and may result in probing questions and discussion and dialogue between attendees and the presenters. Due to the one and a half hour

time limitation established by the Planning Committee, it will be necessary to present data clearly and comprehensively. Additionally, a time limit for resultant questions and answers and dialogue will be established and skillfully and tactfully enforced by the presenters.

The third facet of the Joyce Process Model, Experimentation, provides the attendees with the opportunity and tools with which they will become active participants in the in-service. The Experimentation segment also provides the presenters with the opportunity to evaluate the effectiveness of the data presented during the first two facets as the presenters survey the small group work settings in which the participants apply newly acquired skills and data to practical situations. Within this segment, experimentation, exploration and manipulation of the data presented by means of the first facet of the program, Theory, is made possible.

The final facet, Feedback, is a comprehensive summative, dynamic interchange between the participants and presenters wherein misconceptions are clarified, information is reinforced and new ideas are generated.

Upon the recommendations of the Wayne State University Educational Administration Specialist Degree Program coursework, this model was selected since the in-service designers (presenters) concur with its effectiveness and practical application to this particular in-service program. This research design is free of specific weeknesses and specifically meets the guidelines and criteria established by the

Association's Planning Committee. Thus the Joyce Process Model Design will most effectively disseminate the information on children's gross motor needs and requirements.

The N.A.E.Y.C. membership and conference attendees are composed of early childhood professionals and educators. In-service workshop attendees include a wide and varied range of early childhood educators ranging from researchers in the field of child development, child psychology, early childhood education, vocational education, home economics, and human resource development and family studies, university instructors, public school teachers, private day care business people, college students, caregivers, parents and aides to preschool teachers, elementary school teachers as well as highly renowned and recognized leaders in the field of early childhood educators such as Selma Frieberg, Dr. Terry Brazelton, Burton White, Clare Cherry and DiAnne Pellerin and Kathy Overholser.

The N.A.E.Y.C. was established to inform this varied and diverse population with the latest trends and research findings and projects in the area of young children's growth and development. Annually it provides its membership with a conference wherein the above is accomplished. The N.A.E.Y.C. is a National Organization. Its annual membership draws approximately 40,000 attendees. Additionally, the N.A.E.Y.C. publishes a journal entitled "Young Children" as another vehicle used to disseminate research results to the membership.

The N.A.E.Y.C. has many caucuses and committees established to meet the organizations' needs. The Planning Committee is charged with the screening of potential proposals to be presented

at its annual national conference. Of all the proposals received and reviewed across the nation, only 250 are selected for presentation. Each workshop and in-service presentation is scheduled to present one time. The rooms provided for the presentations accomodate approximately 100 persons.

The data to be used in the in-service program, "Encounters of the Outdoor Kind," has been collected from several sources; the Overholser/Pellerin Playground Survey of 1976, the review of recent and relevant research included in the resume of literature in Chaper I of this work, a collection of slides taken throughout the midwestern United States and Canada by the authors of this work, consultations and correspondences with early childhood educators, playground-designers, architects, and engineers and drom the playscapes designed by the authors of this work.

DESIGN PROCEDURES

The in-service, "Encounters of the Outdoor Kind," will be divided into two segments. The first segment will include the Theory and Process Demonstration facets of the Joyce Process Model. The second segment will include the Experimentation and Feedback facets. In keeping with the Planning Committee guidelines, each segment will be 45 minutes in length for a total of 90 minutes. Supplementing the Joyce Process Model will be a description of environmental considerations, as objective for each segment, list of materials to be used during the presentation, procedures to be followed including a description of activities and/or instructions for the presentation, hand outs, resources, and the device to be used for the evaluation.

SEGMENT 1: THEORY AND DEMONSTRATION

Time allotment: 45 minutes.

Environmental Considerations: Upon entering the room a casette tape recording of Sesame Street's theme song, "Come and Play" will be used as an audience warm up device. It will be located inconspiciously but accessably on a front rectangular table commonly assigned to such meeting rooms. Blow up photographs attractively mounted and displayed around the room will further enhance the atmosphere of the learning environment. The photographs will depict young children engaged in stimulating, creative, developmental gross motor outdoor play activities. The chairs will be arranged in several semi circular rows promoting a closer, more intimate, conversational, instructional climate, conducive to this inservice intent. In front of these rows will be a large screen on which scrupiously selected slides depicting components and considerations as well as designs for young childrens' gross motor outdoor play will be shown. The slide projector will be located in the back of the room, next to one of the presenters who will operate the projector. Ammenities such as glasses and pitchers of ice cold water will be on hand at a table accessable to the audience, but out of thepresenters' way. Name tags are provided identifying attendees by the N.A.E.Y.C. making any additional name tags unnecessary. On the aforementioned rectangular front table, all hand outs, charts, and materials will be available in order of their use and need. At the doors both presenters will greet and welcome the arriving attendees, setting them at ease.

Objectives:

1. Given a discussion lecturette using charts depicting the three basic playground types available; traditional, creative and developmental, the attendees will be able to verbally differentiate between the three basic types.

2. Given the background theory in the area of young children's gross motor outdoor play needs, considerations for play areas, equipment designs and apparati, and methods for providing grossmotor outdoor experiences, the attendees will watch a selected series of slides covering the aforementioned areas.

Materials:

tape cassette and tape
slide projector
extension cord
slide screen
slides and carousel
masking tape
photos
charts
hand outs
ice water, glasses, pitchers
rectangular table

Procedure:

1. Set up tables, chairs, and materials as described in preceding selections.

2. Presenters will greet attendees upon arrival.

3. Introduce presenters providing them with background and credentials. (5 minutes)

4. Lecturette via charts. (20 minute time allotment) Lecturette will discuss characteristics of three basic playground types:

   a. Discuss characteristics of traditional equipment including: types of equipment (swings, slides,

merry-go-rounds, monkey bars, etc.), safety (use Consumer's Statistics), durability, cost, maintenance, gross motor skill potential, space needs, requirements and manipulation.

b. Discuss characteristics of creative equipment including: definition of term, introduction of new materials (wood, chain, rubber, etc.), new surfaces (grass, wood chips, pea gravel, etc.), manipulation, new designs, cost, and safety problems and conerns.

c. Discuss characteristics of developmental equipment including: definition of term, characteristics of equipment, gross motor "fit" and options, manipulation, cost, safety (height, distance between rungs, etc.) escalating in complexity, whole child approach to outdoor play, extension of indoor curriculum to outdoor play, limitations (maintenance).

5. Slide Presentation. (20 minutes time allotment). Transitional aides from charts to slides . . . "We have identified several playground problems, now it is time to present some positive solutions. It has been said that a picture is worth a thousand words, so . . ."

a. Solutions to playground problems: tire swings, tunnel slides, wheel toys, ramps, ladders, nets, manipulatives, sand and water play, dramatic play, quiet areas and activities.

b. Alternative methods for providing enriched outdoor learning experiences: bringing the indoors outdoors, books, blocks, manipulatives, art easels, water, lawn

chairs, dramatic play.

6. Brief question and answer period.

Segment 2: Experimentation and Feedback

Time allotment: 45 minutes.

Environmental Considerations: Small groups will be formed by asking the attendees to change their semi circular row into a small group circle composed of 6 to 10 chairs. The rectangular table and slide apparati are to be removed from the area in order to provide more space for small group work. Remove some photos to provide free frontal wall space.

Objectives:

1. Given the opportunity and materials to apply newly acquired planning skills to a hypothetical playground area, the participants will design a developmental gross motor play area for young children.

2. Given the time and opportunity to ask questions, the participants will ask questions which will be answered by the in-service presenters.

Materials:

large newsprint (18 x 24 inch)
markers
masking tape
activity card for each group (See Appendix IV)

Procedures:

1. Form small groups and distribute materials (newsprint and markers).

2. Small group work. (20 minute time allotment). Say to attendees (providing necessary instruction and direction), "Now it is your turn to become a playgroud designer . . ."

a. Distribute activity cards to each group.

Explain terms on cards.

b. Allow small group work time.

c. Upon completion of task, each group will post activities worksheet on front wall.

3. Feedback from small groups. (Time allotment 15 minutes).

a. Upon posting of the last group's worksheet, the presenter will convene this segment.

b. Read activity card to total group. Tell the group that each small group had exactly the same considerations and criteria with which to work.

c. Compare and contrast the results of small group work.

d. Summarize the inservice with, "So you see, there is more than one way . . . There is no one solution, no one answer, no one playground . . there are many!!"

4. Open discussion to question and answer time.

5. Distribute resource list (See Appendix VI) and hand outs (See Appendix VII).

6. Pass out Evaluation Device and collect completed forms. (See Appendix VII).

CHAPTER IV

Evaluation

The evaluation tools to be used to measure and determine the effectiveness of the in-service, "Encounters of the Outdoor Kind," include the Smile Index, endorsed by Wayne State University Professor Dr. Ronald Urick for its validity and reliability, and the Pellerin/Overholser In-service Evaluation Form to be filled out by in-service attendees. Data from this evaluation form will be used to test the hypotheses of this project and in developing and planning other future in-services in the area of children's gross motor outdoor play.

The Smile Index may be defined as the pronounced visible positive facial expression exhibited by conference participants. A pronounced visible positive facial expression (smile) will be interpreted as evidence of positive feedback to the presenters for the workshop. A negative, pronounced visible facial expression, arched eyebrows, arms crossed defensively across the torso, will be interpreted to indicate negative feedback to the presenters of the workshop concerning the effectiveness of the data presented. No pronounced visible facial response will be interpreted as a neutral response of indifference to the data presented in the workshop.

Since it has already been established throughout this work that most caretakers of young children in many cases have failed to provide appropriate developmental gross motor apparati activities for young children, an in-service developing the

abilities and skills, background theory and research necessary to play and implement gross motor play designs, will be conducted for the National Association for the Education of Young Children 1980 National Conference attendees. This association reaches many early childhood educators, who by virtue of their attendance at the in-service, "Encounters of the Outdoor Kind," demonstrate their need for data in this area. And so, therein lies the answer to Hypothesis Number One of this work which has been articulated as follows: Is there evidence of a lack of information in the area of children's gross motor playground considerations, designs, and apparati? Thus, in the aforementioned manner, Hypothesis Number One will be tested and evaluated. Furthermore, the N.A.E.Y.C.Planning Committee with their selection of the workshop have likewise demonstrated their awareness that interest in additional information in this area has been indicated by members of its organization.

By the nature of the design of this in-service, the second hypothesis will similiarly be tested and evaluated. Hypothesis Number Two has been stated as follows: Will an in-service workshop for the N.A.E.Y.C. conference attendees disseminate information that will provide the attendees with background theory, information and methods for providing appropriate outdoor gross motor experiences and apparati for young children? Specifically this will be accomplished via the procedures, methods, and techniques contained in Segments 1 and 2, of the in-service. Segment 1's lecturette will disseminate information regarding playground apparati types and characteristics. Likewise, the

slide presentation will provide additional information concerning methods and alternative methods to providing children's outdoor play experiences. Segment 2 will provide attendees with the practical, first hand opportunity to utilize and apply newly acquired playground planning skills to a hypothetical playground setting.

Additionally, the data collected by means of the Pellerin/ Overholser In-service Evaluation Form will test the second hypothesis. At the same time, information will be provided by the evaluation forms which will indicate a need for changes, deletions, and/or improvements to more effectively inform future in-service attendees with the data. Those segments which were determined to be successful and/or effective would be retained to be included within future in-services.

Specifically, the Evaluation Form consists of seven easily answered yes/no questions. Question One, "Did the in-service presentation provide you with useful, practical ideas for outdoor play?" is designed to effectively and efficiently determine the practicality of the material presented in the workshop.

Question Two, "Were the lecturettes and data presented clearly?" is designed to test and evaluate the clarity of the lecturettes. As a result, the presenters will gather information from the participants concerning the validity and effectiveness of methods and techniques utilized to present the data.

Question Three, "Were the audio visual charts and slides informative?" is a further test of the effectiveness and the clarity of the use of the audio visual materials, charts and

slides as evaluated by the participants.

Those questions (Numbers one through three) are concerned with the dissemination of information facet of hypothesis number Two.

Question Four, "Do you feel you have a better understanding of children's outdoor play?" tests the participants receptive, subjective and cognitive assimilation of the data presented.

Question Five, "Did the in-service provide you with new methods and ideas for providing appropriate outdoor gross motor experiences for children?" tests whether the participants were provided with new ideas and methods to be used in planning appropriate outdoor gross motor experiences for young children.

Question Six, "Did the in-service provide you with ideas for developmentally appropriate outdoor play apparati.

Question Seven, "What suggestions would you like to make to improve the effectiveness of this in-service?" is designed to provide theppresenters with feedback regarding new, helpful, practical insights in regard to the development of future workshops. This data will be useful in determining the need for changes, deletions and/or improvements to more effectively inform future in-service attendees with the data.

The data from the completed Pellerin/Overholser Evaluation Forms will be analyzed by means of tabulating the percentages of yes and no answers for each question. These tabulations and percentages will be charted (see Appendix VIII) for greater clarity and ease in interpreting the results. The value of the attendees cooperation and participation in the evaluation

process will be verbally stressed by the presenters in order to assure results. However, the presenters cannot be guaranteed of 100% cooperation and therefore will base the evaluation results on a percentage of returns basis rather than on the number of workshop attendees. Therefore the base constituting a 100% will be the total number of returned and completed evaluation forms.

The workshop presenters have determined that a "yes" percentage of 60% or above will indicate success and effectiveness of the particular facet of the workshop which the question was designed to test and evaluate. Any question receiving any percentage less than 60% of its yes answer will indicate an ineffectiveness or failure to meet the objective of the facet of the workshop which the question was designed to evaluate. Consequently, the workshop presenters will find it necessary to determine alternative methods, techniques, and materials to utilize in presenting the date in future workshops in the area of children's outdoor play.

APPENDIX I

OVERHOLSER/PELLERIN PLAYGROUND SURVEY

APPENDIX I

OVERHOLSER/PELLERIN PLAYGROUND SURVEY

	Traditional	Developmental	Combination of both	None
Altar Road Park	X			
Anchor Bay Elementary	X			
Ballduck Park	X			
Bethal Day Care	X			
Brandenburg Park	X			
Briarwood Elementary	X			
Camp Dearborn			X	
Carlson Elementary	X			
Children's World		X		
Church Elementary			X	
East Warren Child Care	X			
East Lansing City Park		X		
Fraser City Park	X			
Grebner Elementary	X			
Hanover Grove Nursery School	X			
Harbor Front		X		
House of the Carpenter				X
Jackson City Park	X			
Kaiser Elementary	X			
Kitty Kampus				X
Little Red Caboose				X
Lincoln Elementary	X			
Macomb Elementary			X	
Marysville City Park	X			
Memorial Child Care		X		
Memorial Park	X			
Miller Elementary	X			
Metropolitan Tot Lot			X	
Merrill-Palmer Institute		X		
Naldrett Elementary	X			
Northwood Elementary	X			
New Baltimore City Park	X			
Mayflower Co-op	X			
Ontario Place Children's Village		X		
Puritan Park		X		
Quinn Road Park		X		
Ridgewood Elementary	X			
Sacred Heart	X			
Saint Mary School		X		
Shadywood Elementary	X			
Sugarbush Elementary		X		
Skidway Lake City Park	X			
Stony Creed Parks	X			
Toronto Public School		X		
Tower High	X			

OVERHOLSER/PELLERIN PLAYGROUND SURVEY
(Continued)

	Traditional	Developmental	Combination of both	None
Warren Woods Church of Nazarene	X			
Wayne State Nursery School	X			
Wee Wisdom Montessori			X	
Westwood Elementary	X			
Holy Innocents				X

APPENDIX II

LETTER FROM THE NATIONAL ASSOCIATION FOR THE EDUCATION OF YOUNG CHILDREN

naeyc annual conference

National Association for the Education of Young Children • 1834 Connecticut Avenue, N.W., Washington, D.C. 20009 (202) 232-8777

Memorandum from: J. D. Andrews, Conference Director April 7, 1980

To: DiAnne M. Pellerin

Re: Encounters of the Outdoor Kind (Creative Changes in Children's Outdoor Play Environments)

On behalf of NAEYC, I am delighted to welcome you as a presenter to the 1980 Annual Conference in San Francisco, November 21-24. Your proposal (mentioned above) has been selected for presentation.

Because yours is one of more than 250 conference sessions, we are communicating with you via form letter. If you have any questions about the conference or your session after reading it, please call or write NAEYC's conference office at the above address.

Your Session -- has a 1¼ hour time slot. A later communication from us will let you know when and where it will be held.

Hotel Reservations. Please use the form in the Preliminary Conference Program (to be mailed in August) or the September issue of Young Children to make arrangements for a room in San Francisco.

Audio-Visual Equipment. In keeping with the concept of personal interaction and due to financial considerations, NAEYC cannot honor all requests for audio-visual equipment. However, we will be able to provide the following requested equipment for your session at no charge to you:

screen and projector table

If you no longer need this equipment for your session, please let us know.

Conference Registration. Presenters receive complimentary registration. We will provide you with information about this procedure in later correspondence. Tour fees are not included with registration. If you wish to take tours, please use the form provided in the Preliminary Program or September Young Children.

IMPORTANT! Please sign and return the enclosed postcard to NAEYC by April 30. It is to officially confirm that you have accepted our invitation to be a conference presenter. (You are also accepting on behalf of your fellow panel members, if any.) Returning the card by this date will enable your session to appear in the Preliminary Program.

We're glad you can join us for four days of sharing, disagreeing, questioning, caring, and learning. It will be a stimulating experience!

cc: Kathleen M. Overholser

APPENDIX III

COMMERCIAL PLAYGROUND EQUIPMENT PRICE LIST

Schoolyard BigToys®7

Northwest Design Products, Inc.
Designers and Manufacturers of play structures and play areas.
3113 South Pine Street, Tacoma, Washington 98409 206/572-7611

Price List 1/80

page		structure	price	wt.
3	SB-1	Main Unit — Multifunctional	$ 6,765.00	9,532 lbs.
3	SB-1ss	SB-1 plus 2 Tire Swings	7,415.00	10,229
3	SB-10	Base segment of SB-1	4,166.00	5,940
5	SB-100	Main Unit — Multifunctional	8,966.00	12,402
5	SB-100ss	SB-100 plus 2 Tire Swings	9,724.00	13,197
7	SB-9a	Core Unit — Multifunctional	2,351.00	3,068
7 & 11	SB-9b	Cable Walk	874.00	1,251
7 & 12	SB-9c	Horizontal Ladder & Rings	1,531.00	2,175
7	SB-9css	SB-9c plus 2 Tire Swings	2,293.00	2,970
9	SB-11	Multifunctional Unit	2,123.00	2,842
11	SB-12	Horizontal Ladder	781.00	1,376
11	SB-17	Parallel Bars	165.00	236
11	SB-21	Stretch Bars	194.00	263
11	SB-18	Climbing Wall	366.00	712
12	SB-19	Jump Ramp	199.00	425
12	SB-22	Tire Climber	432.00	828
12	SB-16	Moving Beam	320.00	600
12	SB-20	Turning Bars	120.00	219
12	4-G	Tire Roll	292.00	414
15	SB-6	Preschool — Multifunctional	4,047.00	5,384
17	SB-2	Preschool — Slide, Tunnel & Decks	1,760.00	2,204
17	4A	Tire Swing	383.00	463
18	SB-3	Preschool — Tunnels, Tires & Decks	1,487.00	2,040
18	SB-24	Preschool — Moving Tunnels	199.00	380
18	SB-26	Preschool — To/Fro Swing	394.00	454
20	SB-501	Multifunctional — Special Ed.	6,642.00	9,984
21	SB-500	Multifunctional — Special Ed.	11,362.00	16,050

H. G. ZIEGLER & ASSOC.
28165 GREENFIELD RD.
SOUTHFIELD, MICH. 48075
PHONE 557-3222

APPENDIX IV

SMALL GROUP ACTIVITY CARD

SMALL GROUP ACTIVITY CARD

Type of Program:	Private Day Care Center
Area:	80 ft. x 120 ft.
Environmental Setting:	Grassy, 3 large trees in northeast corner of area, hill in center.
Ages of Children:	2½ to 6
Number of Children:	75

APPENDIX V

OUTDOOR PLAY RESOURCE LIST

OUTDOOR PLAY RESOURCE LIST

Engstrom, Georgianna; editor - The Significance of the Young Child's Motor Development N.A.E.Y.C. 1971

Friedberg, Paul - Handcrafted Playground: Designs You Can Build Yourself - Vintage Books Random House 1975

Friedberg, Paul - Play and Interplay: A Manifesto for New Designs in Urban Recreational Environments, MacMillan 1970

Hill, Dorothy M. - Mud, Sand & Water - N.A.E.Y.C. 1977

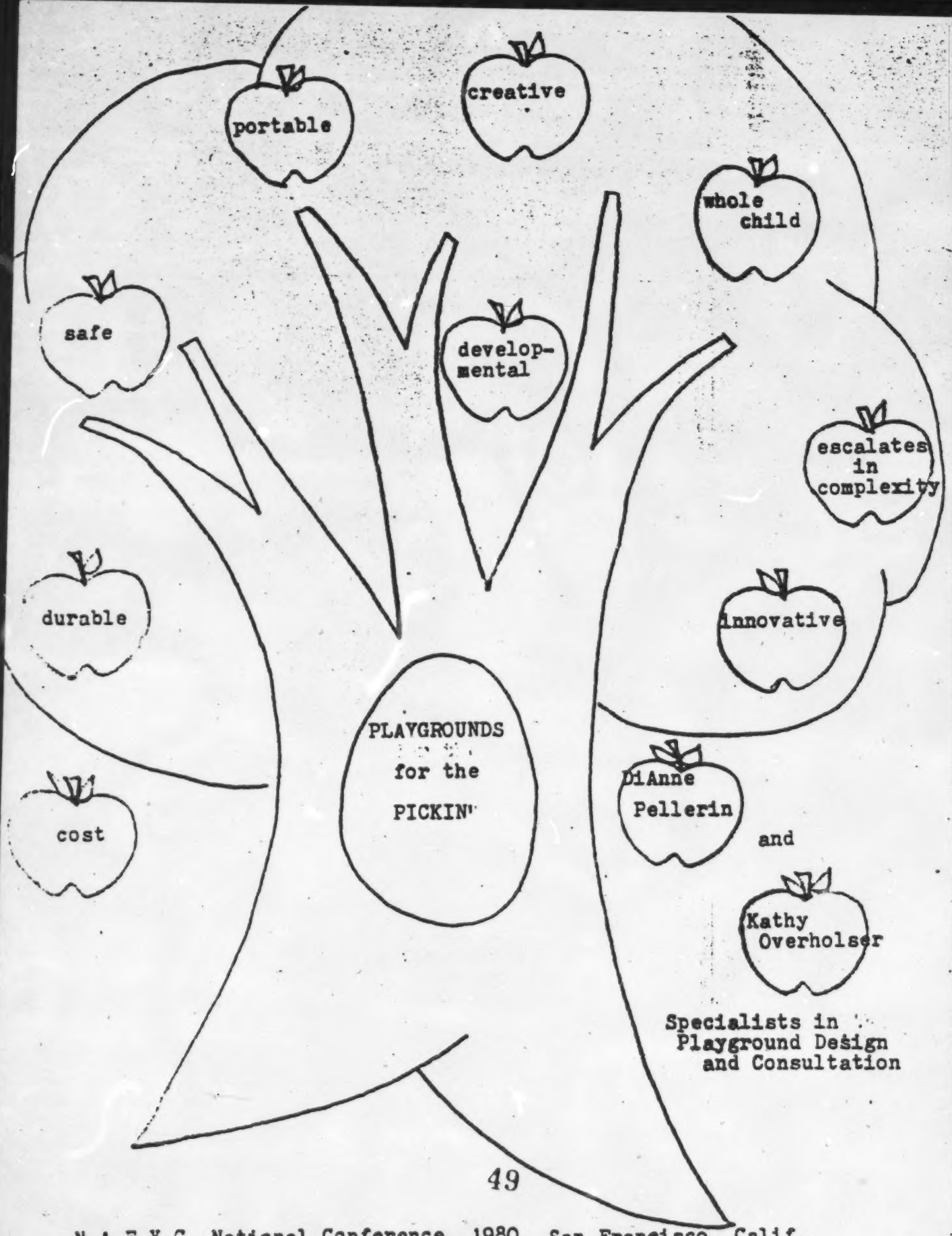
Kritchevsky, Sybil & Prescott, Elizabeth - Planning Environments for Young Children- Physical Space - N.A.E.Y.C. 1977

Lederman, Alfred - Creative Playgrounds and Recreational Centers - Random House 1975

Read, Kathleen Baker - Let's Play Outdoors - N.A.E.Y.C. 1970

APPENDIX VI

HAND OUT FOR "ENCOUNTERS OF THE OUTDOOR KIND"



N.A.E.Y.C. National Conference, 1980, San Francisco, Calif.
ENCOUNTERS OF THE OUTDOOR KIND

APPENDIX VII

EVALUATION DEVICE FOR "ENCOUNTERS OF THE OUTDOOR KIND"

APPENDIX VII

PELLERIN/OVERHOLSER EVALUATION FORM

ENCOUNTERS OF THE OUTDOOR KIND

1. Did the inservice presentation provide you with useful, practical ideas for outdoor play?

   YES NO

2. Were the lecturettes and data presented clearly?

   YES NO

3. Were the audio visual charts and slides informative?

   YES NO

4. Do you feel you have a better understanding of children's outdoor play?

   YES NO

5. Did the inservice provide you with new methods and ideas for providing appropriate outdoor gross motor experience for children?

   YES NO

6. Did the inservice provide you with ideas for developmentally appropriate outdoor play apparati for young children?

   YES NO

7. What suggestions would you like to make to improve the effectiveness of this inservice?

APPENDIX VIII

RESULTS OF PELLERIN/OVERHOLSER EVALUATION FORM

APPENDIX VIII

TABULATION CHART

Evaluation Results:

	YES	NO
Question 1		
Question 2		
Question 3		
Question 4		
Question 5		
Question 6		
Question 7		
TOTAL	___%	___%

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